

Search History. (47 pp.) ~~47~~ - (8/7/05).

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	("udagawa.in.andmondtxa").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 20:18
L2	1	udagawa.in. and mondt.xa.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 20:37
L3	4	((("6069021") or ("6339014"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 20:58
L4	11019	((257/79) or (257/8\$1) or (257/9\$1) or (257/100) or (257/101) or (257/102) or (257/103)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:13
L5	0	L4 and (boron adj phoshphide BP) near4 buffer and (("Ga.sub."\$4 near10 "In.sub."\$4 "N") ("Ga.sub."\$4 "In.sub."\$4 "N") ("In.sub."\$4 near10 "Ga.sub."\$4 "N") ("In.sub."\$4 "Ga.sub."\$4 "N"))) near4 (light-emitting active) and (clad cladding) near4 (("Ga" near4 "N.sub."\$4 near4 "P.sub."\$3) ("GaN.sub."\$4 "P.sub."\$3) ("Ga" near4 "P.sub."\$3 near4 "N.sub."\$3) ("GaP.sub."\$4 "N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:13
L6	19469	((257/79) or (257/8\$1) or (257/9\$1) or (257/100) or (257/101) or (257/102) or (257/103) or (372/4\$3)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:13
L7	0	L6 and (boron adj phoshphide BP) near4 buffer and (("Ga.sub."\$4 near10 "In.sub."\$4 "N") ("Ga.sub."\$4 "In.sub."\$4 "N") ("In.sub."\$4 near10 "Ga.sub."\$4 "N") ("In.sub."\$4 "Ga.sub."\$4 "N"))) near4 (light-emitting active) and (clad cladding) near4 (("Ga" near4 "N.sub."\$4 near4 "P.sub."\$3) ("GaN.sub."\$4 "P.sub."\$3) ("Ga" near4 "P.sub."\$3 near4 "N.sub."\$3) ("GaP.sub."\$4 "N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:13

S1	0	("GaN.P or gallium adj nitride adj phosphide) and light-emitting.ti,ab."). PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 07:56
S2	12	(GaN.P or gallium adj nitride adj phosphide) and light-emitting.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:10
S3	4	(GaN.P or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and boron adj phosphide near3 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 16:53
S4	4	(GaN.P or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 16:54
S5	7	(GaN.P or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P)) and light-emitting.ti,ab. and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 16:58
S6	4	(GaN.P or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:07
S7	4	(GaN.P or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:09

S8	4	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or GaN near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:10
S9	4	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:28
S10	342	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:29
S11	275	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:30

S12	4	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and buffer near12 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:34
S13	489	(257/79).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S14	435	(257/80).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S15	366	(257/81).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S16	814	(257/82).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S17	106	(257/83).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S18	380	(257/84).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35



S19	205	(257/85).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S20	229	(257/86).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S21	56	(257/87).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S22	488	(257/88).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S23	175	(257/89).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S24	83	(257/90).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S25	147	(257/91).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S26	49	(257/92).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36

S27	146	(257/93).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S28	685	(257/94).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S29	239	(257/95).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S30	445	(257/96).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S31	327	(257/97).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S32	1241	(257/98).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S33	1351	(257/99).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S34	318	(257/100).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36

S35	278	(257/101).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S36	308	(257/102).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S37	967	(257/103).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:37
S38	0	("L13orL14orL15orL16orL17orL18 orL19orL20orL21orL22orL23orL24 orL25orL26orL27orL28orL29orL30 orL31orL32orL33orL34orL35orL36 orL37").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:38
S39	6890	((257/79).CCLS.) or ((257/80). CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83). CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86). CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89). CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92). CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95). CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98). CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101). CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:40

S40	0	(((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and ganp.ti, ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:41
S41	13	(((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and (ganp or (gan or gallium adj nitride) near12 phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:43

S42	2	(((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and buffer near12 (bp or boron adj phosphide) and (ganp or (gan or gallium adj nitride) near12 phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:44
S43	13	(((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and (ganp or (gan or gallium adj nitride) near12 phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:47

S44	4	((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and (gan or gallium adj nitride) and ((bp or boron adj phosphide) near12 buffer)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:53
S45	0	jp-410242514\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:54
S46	2	jp-10242514\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:56
S47	2	jp-10242567\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:59
S48	2	jp-10242569\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:09
S49	2	"6316793".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:10
S50	2	"6064082".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:11



S51	2	"5929467".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:11
S52	2	jp-10066769\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 20:04
S53	0	jp-410066769\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:05
S54	1	jp-10066769\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:06
S55	1	jp-11036830\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:06
S56	0	jp-411036830\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:06
S57	0	terashima.in. and buffer	JPO	OR	ON	2002/05/30 20:13
S58	1	light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer) and gallium adj nitride.ti, ab.	JPO	OR	ON	2002/05/30 20:14
S59	1	light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer) and gallium adj nitride	JPO	OR	ON	2002/05/30 20:14
S60	3	(led or light-emitting or light adj emitting).ti,ab. and ((bp or boron adj phosphide) near10 buffer) and gallium adj nitride	JPO	OR	ON	2002/05/30 20:15
S61	4	(GaN or gallium adj nitride adj phosphide or AlGaN or aluminum adj gallium adj nitride adj phosphide or "GaN.sub.1ix.P.subx") and light-emitting.ti,ab. and buffer near10 (bp or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:13
S62	4	(GaN or gallium adj nitride adj phosphide or AlGaN or aluminum adj gallium adj nitride adj phosphide or "GaN.sub.1-x.P.sub.x") and light-emitting.ti,ab. and (bp or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:15
S63	8	((GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride) near6 (P or phosphide)) and light-emitting.ti,ab. and (bp or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:19
S64	7	((GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride) near6 (P or phosphide)) and light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:58

S65	4	((GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride) near6 (P or phosphide)) and light-emitting.ti.ab. and ((bp or boron adj phosphide) near10 buffer) and ((mono-crystal or single adj crystal) near6 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:01
S66	8	light-emitting.ti.ab. and ((bp or boron adj phosphide) near10 buffer) and ((mono-crystal or single adj crystal) near6 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:01
S67	325	light-emitting.ti.ab. and ((mono-crystal or single adj crystal) near6 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:15
S68	184	light-emitting.ti.ab. and ((mono-crystal or single adj crystal) adj substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:16
S69	14	light-emitting.ti.ab. and ((mono-crystal or single adj crystal) adj substrate) and GaN.ti, ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:17
S70	351	buffer adj layer near3 amorphous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:43
S71	4	(bp or boron adj phosphorus) near6 buffer adj layer near3 amorphous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:44
S72	38	amorphous adj buffer adj layer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 10:42
S73	3	amorphous adj buffer adj layer and (single adj crystal or single-crystal) adj buffer adj layer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 11:23
S74	64	single adj (heterojunction or hetero-junction) and (double adj heterojunction or hetero-junction) and "257"/\$6.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 11:26

S75	58	(single adj (heterojunction or hetero-junction)) and (double adj (heterojunction or hetero-junction)) and "257"/\$6. ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 12:36
S76	2	("6150672").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/31 11:47
S77	4	(single adj (heterojunction or hetero-junction)).ti,ab. and (double adj (heterojunction or hetero-junction)) and "257"/\$6. ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 13:07
S78	2	("6150672").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/31 13:41
S79	1	(lattice near6 (match\$3 or mismatch\$3)) near12 (boron adj phosphide or BP or BPN or "BP. sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 15:47
S80	1	(lattice near6 (match\$3 or mismatch\$3)) near12 (boron adj phosphide or BP or BPN or "BP. sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 13:44
S81	29	((boron adj phosphide or bp) near12 buffer) near12 (N or nitrogen)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 14:11
S82	1	(lattice near6 (match\$3 or mismatch\$3)) near12 (boron adj phosphide or BP or BPN or "BP. sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 15:59
S83	1	(lattice near6 (match\$3 or mismatch\$3) or lattice-match\$3 or lattice-mismatch\$3) near12 (boron adj phosphide or BP or BPN or "BP.sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 16:16

S84	1	(lattice near6 (match\$3 or mismatch\$3) or lattice-match\$3 or lattice-mismatch\$3) near12 (boron adj phosphide or BP or BPN or "BP.sub.1-x.N.sub.x" or BNP or "BN.sub.1-x.P.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 16:33
S85	66	(boron adj phosphide or BP or BPN or "BP.sub.1-x.N.sub.x" or BNP or "BN.sub.1-x.P.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 17:58
S86	0	"10-066769"	JPO	OR	ON	2002/05/31 17:59
S87	1	jp-10066769\$-\$.did.	JPO	OR	ON	2002/05/31 18:00
S88	1	jp-10180921\$-\$.did.	JPO	OR	ON	2002/05/31 18:01
S89	0	jp-410180921\$-\$.did.	JPO	OR	ON	2002/05/31 18:01
S90	0	terashima.in. and semiconductor	JPO	OR	ON	2002/05/31 18:12
S91	2	terashima.in. and "1998"	JPO	OR	ON	2002/05/31 18:14
S92	1	jp-10066769\$-\$.did.	JPO	OR	ON	2002/05/31 18:15
S93	1	jp-10180921\$-\$.did.	JPO	OR	ON	2002/05/31 18:16
S94	1	jp-10193125\$-\$.did.	JPO	OR	ON	2002/05/31 18:17
S95	1	jp-10232279\$-\$.did.	JPO	OR	ON	2002/05/31 18:17
S96	1	jp-11036830\$-\$.did.	JPO	OR	ON	2002/05/31 18:18
S97	2301	udagawa.in.	JPO	OR	ON	2002/05/31 18:18
S98	35	udagawa.in. and light-emitting	JPO	OR	ON	2002/05/31 18:18
S99	3	udagawa.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:22
S100	0	terashima.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:23
S101	0	nishimura.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:23
S102	0	tsuzaki.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:23
S103	11550	boron adj phosphide or bp	DERWENT	OR	ON	2002/05/31 18:25
S104	245	(boron adj phosphide or bp) and buffer	DERWENT	OR	ON	2002/05/31 18:25
S105	15	(boron adj phosphide or bp) and buffer adj layer	DERWENT	OR	ON	2002/05/31 18:25

S10 6	62	udagawa.in. and light-emitting	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 10:52
S10 7	1076	udagawa.in. and light-emitting and buffer near6 BP or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP.sub.x. N.sub.1-x" or "BN.sub.x.P.sub.1-x" or "BP.sub.1-x.N.sub.x" or ((BP or boron adj phosphide) near3 nitrogen)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 10:56
S10 8	8	udagawa.in. and light-emitting and (buffer near6 (BP or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP. sub.x.N.sub.1-x" or "BN.sub.x.P. sub.1-x" or "BP.sub.1-x.N.sub.x" or ((BP or boron adj phosphide) near3 nitrogen)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 11:22
S10 9	2	terashima.in. and light-emitting and (buffer near6 (BP or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP.sub.x.N.sub.1-x" or "BN.sub.x. P.sub.1-x" or "BP.sub.1-x.N.sub.x" or ((BP or boron adj phosphide) near3 nitrogen)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:29
S11 0	9	light-emitting.ti,ab. and (buffer near6 (BP or BN or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP.sub.x. N.sub.1-x" or "BN.sub.x.P.sub.1-x" or "BP.sub.1-x.N.sub.x"))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:35
S11 1	0	(lattice adj match\$3 or mismatch\$3) and (((BN or boron adj nitride) near3 buffer) near10 (phosphorus or P)) and (GaN or gallium adj nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:39
S11 2	0	(lattice adj match\$3 or mismatch\$3) and (((BN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:39
S11 3	0	(lattice adj (match\$3 or mismatch\$3)) and (((BN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:40
S11 4	0	(lattice adj (match\$3 or mismatch\$3)) and (((BN or BNP or BPN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:41



S11 5	0	(lattice near6 (match\$3 or mismatch\$3)) and (((BN or BNP or BPN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:42
S11 6	672	(boron adj nitride or BN or boron adj phosphide or BP or BNP) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:43
S11 7	99	(boron adj nitride or BN or boron adj phosphide or BP or BNP) near6 buffer and (GaN or gallium nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 14:48
S11 8	54	(boron adj nitride or BN or BNP) near6 buffer and (GaN or gallium nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 14:50
S11 9	16	(boron adj nitride or BN or BNP) near6 buffer and (GaN or gallium nitride) and (lattice-mismatch or lattice-match\$3 or (lattice near3 (match\$3 or mismatch\$3)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 14:52
S12 0	15	(boron adj nitride or BN or BNP) near6 buffer and (GaN or gallium nitride) near12 (lattice-mismatch or lattice-match\$3 or (lattice near3 (match\$3 or mismatch\$3)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:39
S12 1	0	gallium adj nitride adj phosphide and light-emitting.ti,ab. and phosphorus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:40
S12 2	7	(GaNp or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and (phosphorus or P)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:42
S12 3	0	(GaNp or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and phosphorus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:43
S12 4	2	(GaNp or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and phosphorus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:21



S12 5	2	lamp.ti,ab. and light-emitting.ti,ab. and semiconductor.ti,ab. and group adj "III-V"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:23
S12 6	6	lamp.ti,ab. and light-emitting.ti,ab. and semiconductor.ti,ab. and GaN	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:31
S12 7	8	lamp.ti,ab. and light-emitting.ti,ab. and GaN	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:31
S12 8	3	lamp.ti,ab. and light-emitting.ti,ab. and GaN and mount\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 18:57
S12 9	4	((("5042043") or ("6372356") or ("5612551") or ("5326424"))).PN.	USPAT; USOCR	OR	OFF	2002/06/01 19:01
S13 0	7496	((257/79) or (257/85) or (257/86) or (257/94) or (257/102) or (257/103) or (372/43)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/06/01 19:23
S13 1	3	((((257/79) or (257/85) or (257/86) or (257/94) or (257/102) or (257/103) or (372/43)).CCLS.) and (gallium adj nitride or gallium adj phosphide or GaN or GaP or "GaN.sub.1-x.P.sub.x" or "GaN. sub.x.P.sub.1-x") and buffer near4 (BN or BP or BNP or BPN or "BN. sub.x.P.1-x" or "BN.sub.1-x.P.sub. x" or boron adj nitride or boron adj phosphide) and (lattice near12 (match\$3 or mismatch\$3) or lattice-match\$3 or lattice-mismatch\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 19:28
S13 2	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/11/10 14:02

S13 3	21	(US-6392257-\$ or US-5326424-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-5612551-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-6064082-\$).did. or (US-20020038892-\$ or US-20020030246-\$ or US-20020000563-\$).did. or (JP-11045892-\$ or JP-10242567-\$ or JP-10242514-\$ or JP-10242569-\$).did. or (JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$ or EP-395392-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2002/11/10 14:08
S13 4	13	((US-6392257-\$ or US-5326424-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-5612551-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-6064082-\$).did. or (US-20020038892-\$ or US-20020030246-\$ or US-20020000563-\$).did. or (JP-11045892-\$ or JP-10242567-\$ or JP-10242514-\$ or JP-10242569-\$).did. or (JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$ or EP-395392-\$).did.) and (amorphous or crytalline or crystal) near12 (boron adj phosphide or bp or buffer or current-blocking or current adj blocking)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 14:09

S13 5	13	((US-6392257-\$ or US-5326424-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-5612551-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-6064082-\$).did. or (US-20020038892-\$ or US-20020030246-\$ or US-20020000563-\$).did. or (JP-11045892-\$ or JP-10242567-\$ or JP-10242514-\$ or JP-10242569-\$).did. or (JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$ or EP-395392-\$).did.) and (amorphous or crystalline or crystal) near12 (boron adj phosphide or bp or buffer or current-blocking or current adj blocking)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 15:47
S13 6	212	oh.in. and won.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 15:48
S13 7	18	oh.in. and won.in. and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 15:48
S13 8	4	oh.in. and won.in. and buffer and nitride	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 16:37
S13 9	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/11/10 16:37
S14 0	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/04/15 17:45
S14 1	344	mixed adj crystal near12 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:46

S14 2	254	mixed adj crystal near6 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:47
S14 3	145	mixed adj crystal near3 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:47
S14 4	87	mixed adj crystal near3 (single-crystal or single adj crystal or monocrystal).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:47
S14 5	0	"GaN.sub.0.97Psub.0.03"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:55
S14 6	0	"Ga N.sub.0.97 P.sub.0.03"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:56
S14 7	0	"Ga N.sub."\$6 near2 "P.sub."\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:58
S14 8	7	"Ga N.sub."	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:58
S14 9	0	"GaN.sub."	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:59
S15 0	94	"GaN.sub"\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:00
S15 1	12	"GaN.sub"\$6 and (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:01

S15 2	0	"GaP.sub"\$6 near20 (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:01
S15 3	4	"GaN.sub"\$6 near20 (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:04
S15 4	2	"GaN.sub"\$6 near20 buffer and (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:05
S15 5	1024	mixed adj crystal.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:06
S15 6	103	mixed adj crystal.ti. and (single-crystal or single adj crystal or single-crystalline or single adj crystalline or monocrystal or monocrystalline)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:27
S15 7	2	lattice adj match\$3 near20 (boron adj phosphide or BP) near20 (gallium adj nitride or GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:28
S15 8	2	(lattice-match\$3 lattice adj match\$3) near20 (boron adj phosphide or BP) near20 (gallium adj nitride or GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:36
S15 9	86	(gan or gallium adj nitride) near20 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:37
S16 0	13	(gan or gallium adj nitride) near20 (boron adj phosphide or bp) near20 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 12:35
S16 1	173	(gan or gallium adj nitride) near20 lattice adj constant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:39

S16 2	11	(gan or gallium adj nitride) near20 buffer adj layer near20 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:40
S16 3	5	(single-crystal or single adj crystal or monocrystalline) near20 (gan or gallium adj nitride) near20 buffer adj layer near20 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:47
S16 4	556	(vapor adj phase adj growth or CVD) near3 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:56
S16 5	192	(vapor adj phase adj growth or CVD) near3 (single-crystal or single adj crystal or monocrystal). ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 14:37
S16 6	1	increase near12 lattice adj parameter near12 (phosphorous or phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 15:52
S16 7	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/04/16 15:52
S16 8	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/10/22 19:01
S16 9	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/10/23 19:10
S17 0	0	((latticeadjmatchinglatticceadjmism atch)and257/79.ccls.257/8\$1.ccls. 257/9\$1.ccls.257/100.ccls. 257/101.ccls.257/102.ccls. 257/103.ccls.)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/10/23 19:12



S17 1	359	(lattice adj matching lattice adj mismatch) and (257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/102.ccls. 257/103.ccls.)	USPAT	OR	OFF	2003/10/23 19:13
S17 2	20	(lattice adj matching lattice adj mismatch).ti;ab,clm. and group adj III and (257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/102.ccls. 257/103.ccls.)	USPAT	OR	OFF	2003/10/23 19:13
S17 3	4447	((257/79) or (257/80) or (257/81) or (257/82) or (257/83) or (257/84) or (257/85) or (257/86) or (257/86) or (257/87) or (257/88) or (257/89) or (257/90) or (257/91) or (257/92) or (257/93) or (257/94) or (257/95) or (257/96) or (257/97) or (257/98) or (257/99) or (257/100) or (257/101) or (257/102) or (257/103)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2003/11/03 11:30
S17 4	8	((257/79) or (257/80) or (257/81) or (257/82) or (257/83) or (257/84) or (257/85) or (257/86) or (257/86) or (257/87) or (257/88) or (257/89) or (257/90) or (257/91) or (257/92) or (257/93) or (257/94) or (257/95) or (257/96) or (257/97) or (257/98) or (257/99) or (257/100) or (257/101) or (257/102) or (257/103)).CCLS.) and (GaNP GaPN gallium adj phosphide adj nitride) and cubic	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/11/03 11:32
S17 5	5	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:33
S17 6	6	"753393".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 13:57
S17 7	11	(("6069021") or ("5042043") or ("5326424") or ("6121637") or ("5612551")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 13:58

S17 8	55	buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$2"P.sub."\$2 "BP.sub."\$2"N.sub." "\$2) and (laser light-emitting light adj emitting).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 15:28
S17 9	17	buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$3"P.sub."\$3 "BP.sub."\$3"N.sub." "\$3) and (laser light-emitting light adj emitting).ti,ab,clm. and single adj crystal adj substrate and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub." "\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:39
S18 0	19	buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$3"P.sub."\$3 "BP.sub."\$3"N.sub." "\$3) and (laser light-emitting light adj emitting).ti,ab,clm. and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub." "\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 16:56
S18 1	2	(buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$3"P.sub."\$3 "BP.sub."\$3"N.sub." "\$3) and (laser light-emitting light adj emitting).ti,ab,clm. and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub." "\$3"N.sub."\$3)) not (buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting).ti, ab,clm. and single adj crystal adj substrate and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub."\$3"N.sub."\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 16:23

S18 2	36	(US-6787814-\$ or US-6541799-\$ or US-6150672-\$ or US-6316793-\$ or US-6069021-\$ or US-6064082-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-5326424-\$ or US-6392257-\$ or US-5612551-\$ or US-6730941-\$ or US-6797990-\$).did. or (US-20020000563-\$ or US-20010054717-\$ or US-20030178631-\$ or US-20020030246-\$ or US-20020038892-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030027099-\$ or US-20030141509-\$ or US-20030173573-\$ or US-20030160253-\$).did. or (JP-10242514-\$ or JP-10242567-\$ or JP-11199397-\$ or JP-11045892-\$ or JP-2002009340-\$ or JP-10242569-\$).did. or (EP-395392-\$ or US-20010054717-\$ or JP-2000332294-\$ or JP-2000188260-\$ or JP-2000004046-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/28 16:25
S18 3	19	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting).ti, ab,clm. and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:13
S18 4	432	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:13
S18 5	110	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:14

S18 6	9	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting) and (GaInN GaNP GaPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:15
S18 7	2	("6194744").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:39
S18 8	36	(US-5042043-\$ or US-6194744-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-6392257-\$ or US-5326424-\$ or US-6064082-\$ or US-5929467-\$ or US-6541799-\$ or US-6787814-\$ or US-6797990-\$ or US-6730941-\$ or US-5612551-\$).did. or (US-20010054717-\$ or US-20020000563-\$ or US-20020030246-\$ or US-20030027099-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030178631-\$ or US-20030141509-\$ or US-20030173573-\$ or US-20030160253-\$ or US-20020038892-\$).did. or (JP-2002009340-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-11199397-\$ or JP-10242569-\$ or JP-11045892-\$).did. or (US-20010054717-\$ or EP-395392-\$ or JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/29 09:59
S18 9	30	(light adj emitting active) near4 (gallium adj nitride adj phosphide gallium adj phosphide adj nitride GaNP GaPN "Ga.sub."\$3"N.sub."\$3"P.sub."\$3 "Ga.sub."\$3"N.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/29 10:02
S19 0	7	(light adj emitting active) near4 (gallium adj nitride adj phosphide gallium adj phosphide adj nitride GaNP GaPN "Ga.sub."\$3"N.sub."\$3"P.sub."\$3 "Ga.sub."\$3"N.sub."\$3"P.sub."\$3) and buffer near4 (BP BPN BNP boron)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/29 10:13

S19 1	285	UDAGAWA.IN. AND (light adj emitting laser)	JPO; DERWENT	OR	OFF	2004/09/29 10:14
S19 2	122	takashi near2 udagawa.in. and (light adj emitting laser)	JPO; DERWENT	OR	OFF	2004/09/29 10:14
S19 3	122	takashi near2 udagawa.in. and (light adj emitting laser).ti,ab,clm.	JPO; DERWENT	OR	OFF	2004/09/29 10:30
S19 4	0	takashi near2 udagawa.in.	DERWENT	OR	OFF	2004/09/29 10:30
S19 5	27726	showa.as.	DERWENT	OR	OFF	2004/09/29 10:30
S19 6	524	showa.as. and (light adj emitting laser).ti,ab.	DERWENT	OR	OFF	2004/09/29 10:31
S19 7	48	showa.as. and (light adj emitting laser).ti,ab. and buffer.ti,ab.	DERWENT	OR	OFF	2004/09/29 10:42
S19 8	0	amorphous near4 (low adj tempetaure LT) near4 buffer near12 (boron BP BNP BPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 10:43
S19 9	0	(low adj tempetaure LT) near4 buffer near12 (boron BP BNP BPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 10:44
S20 0	27	(low adj temperature LT) near4 buffer near12 (boron BP BNP BPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:19
S20 1	2	("5789768").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:31
S20 2	0	((("5789768").PN.) and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:22
S20 3	0	((("5789768").PN.) and boron	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:22
S20 4	0	BP and ((("5789768").PN.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:22

S20 5	48	buffer and udagawa.in. and (BP boron) near4 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:35
S20 6	0	("udagawa.in.and(baumeister.xa.baumeister.xp.)").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:31
S20 7	0	udagawa.in. and (baumeister.xa.baumeister.xp.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:31
S20 8	5	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:51
S20 9	2	"20030173573"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:40
S21 0	22	buffer near4 (boron BP B-based BP-based).clm. and (light-emitting laser light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:41
S21 1	3	buffer near4 (boron BP B-based BP-based).clm. and (light-emitting laser light adj emitting) and ("GaN.sub.1-x"\$3"P.sub."\$3 "GaN.sub.x"\$3"P.sub.1-x"\$3).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:53
S21 2	2	("6079064").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:53
S21 3	2	("6078064").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:54



S21 4	2	("5789768").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:55
S21 5	2	("5076860").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 12:09
S21 6	7	"GaN.sub."\$3"P.sub."\$3 near4 (active clad cladding light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 12:11
S21 7	38	(gallium adj nitride adj phosphide gallium adj phosphide adj nitride GANP GAPN "GaN.sub."\$3"P.sub. "\$3) near4 (active clad cladding light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 12:20
S21 8	10	(gallium adj nitride adj phosphide gallium adj phosphide adj nitride GANP GAPN "GaN.sub."\$3"P.sub. "\$3) near4 (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:19
S21 9	5	((gallium adj nitride adj phosphide gallium adj phosphide adj nitride GANP GAPN "GaN.sub."\$3"P.sub. "\$3) near4 (clad cladding)) not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:45
S22 0	4	("6233264").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:33
S22 1	1	jp-05141750\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:46
S22 2	1	kondo.in. and lattice adj distortion.ti,ab,clm. and epitaxially	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:25

S22 3	9	buffer near5 boron adj phosphide and "GaN.sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 18:15
S22 4	10	buffer near5 (BP BP-based BPN BNP "BP.sub."\$3 "BN.sub."\$3"P.sub."\$3 boron adj phosphide) and "GaN.sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:28
S22 5	13	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:59
S22 6	3	"090344".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:59
S22 7	10	buffer near5 (BP BNP BPN "B.sub."\$3"P.sub."\$3 "B.sub."\$3"P.sub."\$3 boron adj phosphide) and "GaN.sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 18:16
S22 8	4	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) near12 ("GaP.sub."\$3"N.sub."\$3 "GaN.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:01
S22 9	2	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer near12 ("GaP.sub."\$3"N.sub."\$3 "GaN.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:02
S23 0	11	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer and ("GaP.sub."\$3"N.sub."\$3 "GaN.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:03
S23 1	597	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:04
S23 2	160	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:04

S23 3	123	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer.ti,ab,clm. not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:39
S23 4	5	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 10:26
S23 5	949	mixed adj crystal.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 10:26
S23 6	113	mixed adj crystal.ti. and laser.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 10:26
S23 7	40	mixed adj crystal.ti. and laser.ti. and (active light-emitting).ti,ab, clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:24
S23 8	2	(single adj heterojunction single adj heterostructure SH) and buffer and GaNP and GaInP	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:25
S23 9	2	(single adj heterojunction single adj heterostructure SH) and buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and GaInP	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:28
S24 0	13	(single adj heterojunction single adj heterostructure SH) and buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:30

S24 1	37	buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:33
S24 2	3	buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) near6 (clad cladding) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) near6 (active light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:35
S24 3	3	(gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) near6 (clad cladding) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) near6 (active light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:35
S24 4	34	buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) and (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:35
S24 5	19	(buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) and (clad cladding)) not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:38
S24 6	3	(buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) near6 (clad cladding)) not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:49

S24 7	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:49
S24 8	0	((("5042043").PN.) and indium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:44
S24 9	31	alumin\$um adj free same indium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:50
S25 0	5	alumin\$um adj free same indium and (light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:54
S25 1	1971	(InN GaN) near4 (active light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:56
S25 2	5	(InN GaN) near4 (active light-emitting light adj emitting) and (GaNP GaPN "GaN.sub."\$3"P. sub."\$3 "GaP.sub."\$3"N.sub."\$3 gallium adj nitride adj phosphide gallium adj phosphide adj nitride) near4 (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 12:00
S25 3	7	(boron adj phosphide BP) near4 buffer and GaN near4 (light-emitting active light adj emitting) and GaN near4 (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 12:46
S25 4	2	lattice adj constant near4 "GaN. sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 12:47
S25 5	36	"5042043"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 13:35
S25 6	6	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/09/30 13:38

S25 7	7	jp-10242514\$-\$.did. jp-10242567\$-\$.did. jp-10242569\$-\$.did. jp-11045892\$-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 13:55
S25 8	13	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.) (jp-10242514\$-\$.did. jp-10242567\$-\$.did. jp-10242569\$-\$.did. jp-11045892\$-\$.did.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:17
S25 9	13	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.) (jp-10242514\$-\$.did. jp-10242567\$-\$.did. jp-10242569\$-\$.did. jp-11045892\$-\$.did.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:17
S26 0	22827	257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/103.ccls. 372/4\$1.ccls. 372/50.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:19
S26 1	13	(257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/103.ccls. 372/4\$1.ccls. 372/50.ccls.) and boron near4 buffer and gallium adj2 nitride and lattice near2 match\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:30
S26 2	12	advantage near4 phosphorus near12 (dopant doping)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:32
S26 3	0	advantage near4 phosphorus near12 (dopant doping) same GaN same (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:33
S26 4	145	n-type adj GaN near4 (clad cladding) adj layer same (P phosphor\$us)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:34
S26 5	121	n-type adj GaN near4 (clad cladding) adj layer same (P phosphor\$us) and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:34



S26 6	16	n-type adj GaN near4 (clad cladding) adj layer near4 (P phosphor\$us) and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:36
S26 7	0	n-type adj GaN near4 (clad cladding) adj layer near4 (phosphor\$us phosphor) and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:37
S26 8	0	n-type adj GaN near4 (clad cladding) adj layer near4 dopant and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:37
S26 9	0	n-type adj GaN near4 (clad cladding) adj layer near4 dopant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:38
S27 0	0	(n-GaN n-type adj GaN) near4 (clad cladding) adj layer near4 dopant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:38
S27 1	22	(n-GaN n-type adj GaN) near4 (clad cladding) adj layer near4 (doped impurities dopant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:38
S27 2	27	"6069021"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:46
S27 3	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:47
S27 4	1	"4293370".PN.	USPAT	OR	OFF	2004/09/30 14:47
S27 5	0	("GaNnear4N-dopednear4Pandligh tadj emitting.ti,ab,clm.").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:48



S27 6	9	GaN near4 N-doped near4 P and light adj emitting.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:51
S27 7	11	(gallium adj nitride GaN) near4 N-doped near4 P and light adj emitting.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:52
S27 8	0	(gallium adj nitride GaN) near4 "doped with P" and light adj emitting.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:52
S27 9	0	(gallium adj nitride GaN) near4 "doped with P"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 0	0	(gallium adj nitride GaN) near6 "doped with P"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 1	0	(gallium adj nitride GaN) near6 "doped with phosphorus"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 2	0	(gallium adj nitride GaN) near6 "doped with phosphorous"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 3	2	(gallium adj nitride GaN) adj layer near4 doped same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:09
S28 4	2	(gallium adj nitride GaN) adj layer near4 (doping doped) same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:56
S28 5	10	(gallium adj nitride GaN) adj layer near4 (n-type doping doped) same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:56

S28 6	9	(gallium adj nitride GaN) adj layer near4 n-type same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:11
S28 7	795	(gallium adj nitride GaN) adj layer near4 n-type same ("P" phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:12
S28 8	287	(gallium adj nitride GaN) adj layer near4 n-type near4 ("P" phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:27
S28 9	21	(gallium adj nitride GaN) adj layer near4 n-type near4 ("P" phosphorous phosphorus phosphor) and (phosporous phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:28
S29 6	12	jp-05283744\$-\$.did. jp-11266006\$-\$.did. jp-02288388\$-\$.did. jp-08064870\$-\$.did. jp-08236810\$-\$.did. jp-2000012896\$-\$.did. jp-20000311614\$-\$.did.	JPO; DERWENT	OR	OFF	2005/03/09 06:21
S29 7	14	jp-05283744\$-\$.did. jp-11266006\$-\$.did. jp-02288388\$-\$.did. jp-08064870\$-\$.did. jp-08236810\$-\$.did. jp-2000012896\$-\$.did. jp-2000031164\$-\$.did.	JPO; DERWENT	OR	OFF	2005/03/09 06:21
S29 8	26	(US-6121637-\$ or US-6069021-\$ or US-5042043-\$ or US-6372356-\$ or US-5612551-\$ or US-5326424-\$).did. or (JP-11045892-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-11045892-\$ or EP-395392-\$ or JP-10242514-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	USPAT; JPO; DERWENT	OR	OFF	2005/03/09 06:24

S29 9	26	(US-6121637-\$ or US-6069021-\$ or US-5042043-\$ or US-6372356-\$ or US-5612551-\$ or US-5326424-\$).did. or (JP-11045892-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-11045892-\$ or EP-395392-\$ or JP-10242514-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	USPAT; JPO; DERWENT	OR	OFF	2005/03/09 07:07
S30 0	2	("6069021").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 10:26
S30 1	6	"753393".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 07:56
S30 2	26	(US-6121637-\$ or US-6069021-\$ or US-5042043-\$ or US-6372356-\$ or US-5612551-\$ or US-5326424-\$).did. or (JP-11045892-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-11045892-\$ or EP-395392-\$ or JP-10242514-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	USPAT; JPO; DERWENT	OR	OFF	2005/03/09 08:12
S30 3	3	S302 and dislocation	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 08:13

S30 4	634	dislocation adj density and lattice adj (mismatch\$3 match\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 08:21
S30 5	376	dislocation adj density and lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:23
S30 6	0	S302 and dislocation adj density and lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:23
S30 7	15	dislocation adj density near6 lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:29
S30 8	15	dislocation adj density near6 lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN) and dislocation adj density	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:29
S30 9	6	(US-20040144990-\$ or US-20020086627-\$).did. or (US-5321101-\$ or US-4633280-\$ or US-4086078-\$).did. or (EP-753393-\$).did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2005/03/09 09:42
S31 0	1	(US-20040144990-\$).did.	US-PGPUB	OR	OFF	2005/03/09 09:43
S31 1	0	Mg adj doped near4 ("Ga.sub. "\$3"In.sub."\$3"N" and lattice adj (parameter constant))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 10:33
S31 2	0	"Ga.sub."\$3"In.sub."\$3"N" near4 lattice adj (parameter constant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 10:34
S31 3	78	"Ga.sub."\$3"In.sub."\$3"N" and lattice adj (parameter constant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 10:34

S31 4	6	(undoped un-doped) near3 "Ga. sub."\$3"In.sub."\$3"N" and lattice adj (parameter constant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 13:10
S31 5	59	single adj heterostructure and (GaN GaInN) and (372/4\$1.ccls. 372/50.ccls. 257/79.ccls. 257/8\$1. ccls. 257/9\$1.ccls. 257/10\$1.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 13:12
S31 6	14	(JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-05283744-\$ or JP-08064870-\$ or EP-395392-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	JPO; DERWENT	OR	OFF	2005/03/09 15:28
S31 7	2	("5042043").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 15:35
S31 8	3	("GaN.sub."\$3"P.sub."\$3 "GaP. sub."\$3"N.sub."\$3) near4 (clad cladding) adj (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:15
S31 9	6	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:22
S32 0	13	((("5042043") or ("5326424") or ("5612551") or ("6069021") or ("6121637") or ("6372356")).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:39
S32 1	2	("6,339,014").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:32
S32 2	0	S320 and single adj heterostructure	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:39

S32 3	0	S320 and (single adj heterostructure single-heterostructure)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:39
S32 4	0	S320 and (single adj heterostructure single-heterostructure)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:44
S32 5	310	(single adj heterostructure single-heterostructure) and (light-emitting laser light adj emitting).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:44
S32 6	0	(single adj heterostructure single-heterostructure) and (light-emitting laser light adj emitting).ti,ab,clm. and (boron BP "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) near4 (buffer binding adhesive adhesion transitiona\$2 matching)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:46



S32 7	72	(US-20010054717-\$ or US-20020000563-\$ or US-20020030246-\$ or US-20020038892-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030027099-\$ or US-20030047795-\$ or US-20030141509-\$ or US-20030160253-\$ or US-20030173573-\$ or US-20030178631-\$ or US-20030209714-\$ or US-20030234400-\$ or US-20040144990-\$ or US-20040169180-\$ or US-20040183089-\$).did. or (US-5042043-\$ or US-5326424-\$ or US-5612551-\$ or US-5929467-\$ or US-6064082-\$ or US-6069021-\$ or US-6078064-\$ or US-6121637-\$ or US-6150672-\$ or US-6194744-\$ or US-6266355-\$ or US-6316793-\$ or US-6339014-\$ or US-6342405-\$ or US-6372356-\$ or US-6392257-\$ or US-6541799-\$ or US-6613461-\$ or US-6730941-\$ or US-6787814-\$ or US-6797990-\$).did. or (JP-10032370-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-10247760-\$ or JP-11045892-\$ or JP-11199397-\$ or JP-2000058451-\$ or JP-2000150957-\$ or JP-2000174342-\$ or JP-2000235956-\$ or JP-2001320089-\$ or JP-2002009340-\$ or JP-2000012896-\$ or JP-11266006-\$ or JP-08236810-\$ or JP-08064870-\$ or JP-05283744-\$ or JP-02288388-\$ or JP-2000031164-\$).did. or (EP-395392-\$ or JP-11045892-\$ or JP-2000188260-\$ or JP-2000332294-\$ or JP-2000004046-\$ or US-20010054717-\$ or JP-2001320089-\$ or JP-2000012896-\$ or JP-11266006-\$ or JP-08236810-\$ or JP-08064870-\$ or JP-05283744-\$ or JP-2000031164-\$ or US-6069021-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2005/03/09 16:55
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S32 8	12	S327 and (single adj heterostructure single adj hetero)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2005/03/09 16:55
S33 0	688	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:50
S33 1	5	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub." "\$4"N.sub."\$4) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:14
S33 2	55	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub." "\$4"N.sub."\$4 (p-doped p-type) near10 GaN) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:57
S33 3	69	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub." "\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:58
S33 4	30	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub." "\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film) and S332	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:58
S33 5	29	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub." "\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film) and S332 and (buffer intermediate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:59

S33 6	7	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"GaN.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub." "\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film) and S332 and (buffer intermediate) near10 (boron boron-based BP B)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:59
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S33 7	73	(US-20010054717-\$ or US-20020000563-\$ or US-20020030246-\$ or US-20020038892-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030027099-\$ or US-20030047795-\$ or US-20030141509-\$ or US-20030160253-\$ or US-20030173573-\$ or US-20030178631-\$ or US-20030209714-\$ or US-20030234400-\$ or US-20040144990-\$ or US-20040169180-\$ or US-20040183089-\$ or US-20030205711-\$).did. or (US-5042043-\$ or US-5326424-\$ or US-5612551-\$ or US-5929467-\$ or US-6064082-\$ or US-6069021-\$ or US-6078064-\$ or US-6121637-\$ or US-6150672-\$ or US-6194744-\$ or US-6266355-\$ or US-6316793-\$ or US-6339014-\$ or US-6342405-\$ or US-6372356-\$ or US-6392257-\$ or US-6541799-\$ or US-6613461-\$ or US-6730941-\$ or US-6787814-\$ or US-6797990-\$).did. or (JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-08236810-\$ or JP-10032370-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-10247760-\$ or JP-11045892-\$ or JP-11199397-\$ or JP-11266006-\$ or JP-2000012896-\$ or JP-2000031164-\$ or JP-2000058451-\$ or JP-2000150957-\$ or JP-2000174342-\$ or JP-2000235956-\$ or JP-2001320089-\$ or JP-2002009340-\$).did. or (EP-395392-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-08236810-\$ or JP-11045892-\$ or JP-11266006-\$ or JP-2000012896-\$ or JP-2000031164-\$ or US-6069021-\$ or JP-2000188260-\$ or JP-2000332294-\$ or JP-2000004046-\$ or US-20010054717-\$ or JP-2001320089-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2005/03/10 09:25
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S33 8	24	S337 and (single adj crystal monocrystalline monocrystal) near6 (clad cladding nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:10
S33 9	2	jp-2000188260\$-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:18
S34 0	35	"6069021"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:18
S34 1	2	("6069021").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:44
S34 2	8	(GaInN InGaN GaN InN "Ga.sub. "\$4"In.sub."\$4N "In.sub."\$4"Ga. sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P. sub."\$4 "GaP.sub."\$4"N.sub."\$4) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 10:58
S34 3	5	(GaInN InGaN GaN InN "Ga.sub. "\$4"In.sub."\$4N "In.sub."\$4"Ga. sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P. sub."\$4 "GaP.sub."\$4"N.sub."\$4) near10 (clad cladding) adj2 (layer film) and (buffer intermediate matching) near5 (boron-based boron BP BN BPN BNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 10:59
S34 4	149	(single adj crystal monocrystalline) near4 mocvd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:14
S34 5	67	(single adj crystal monocrystalline) near4 mocvd and nitride and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:15

S34 6	54	(single adj crystal monocrystalline) near4 mocvd and nitride.ti,ab,clm. and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:21
S34 7	35	(single adj crystal monocrystalline) near4 mocvd.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:21



Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	("udagawa.in.andmondt.xa.").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 20:18
L2	1	udagawa.in. and mondt.xa.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 20:37
L3	4	((("6069021") or ("6339014")).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 20:58
L4	11019	((257/79) or (257/8\$1) or (257/9\$1) or (257/100) or (257/101) or (257/102) or (257/103)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:13
L5	0	L4 and (boron adj phoshphide BP) near4 buffer and (("Ga.sub."\$4 near10 "In.sub."\$4 "N") ("Ga.sub."\$4 "In.sub."\$4 "N") ("In.sub."\$4 near10 "Ga.sub."\$4 "N") ("In.sub."\$4 "Ga.sub."\$4 "N"))) near4 (light-emitting active) and (clad cladding) near4 (("Ga" near4 "N.sub."\$4 near4 "P.sub."\$3) ("GaN.sub."\$4 "P.sub."\$3) ("Ga" near4 "P.sub."\$3 near4 "N.sub."\$3) ("GaP.sub."\$4 "N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:25
L6	19469	((257/79) or (257/8\$1) or (257/9\$1) or (257/100) or (257/101) or (257/102) or (257/103) or (372/4\$3)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:13
L7	0	L6 and (boron adj phoshphide BP) near4 buffer and (("Ga.sub."\$4 near10 "In.sub."\$4 "N") ("Ga.sub."\$4 "In.sub."\$4 "N") ("In.sub."\$4 near10 "Ga.sub."\$4 "N") ("In.sub."\$4 "Ga.sub."\$4 "N"))) near4 (light-emitting active) and (clad cladding) near4 (("Ga" near4 "N.sub."\$4 near4 "P.sub."\$3) ("GaN.sub."\$4 "P.sub."\$3) ("Ga" near4 "P.sub."\$3 near4 "N.sub."\$3) ("GaP.sub."\$4 "N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:23

L8	13802	((372/43\$4) or (372/44\$4) or (372/45\$4) or (372/46\$4) or (372/47\$4) or (372/48\$4) or (372/49\$4) or (372/50\$4)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:24
L9	0	L8 and (boron adj phosphide BP) near4 buffer and (("Ga.sub."\$4 near10 "In.sub."\$4 "N") ("Ga.sub."\$4 "In.sub."\$4 "N") ("In.sub."\$4 near10 "Ga.sub."\$4 "N") ("In.sub."\$4 "Ga.sub."\$4 "N"))) near4 (light-emitting active) and (clad cladding) near4 (("Ga" near4 "N.sub."\$4 near4 "P.sub."\$3) ("GaN.sub."\$4 "P.sub."\$3) ("Ga" near4 "P.sub."\$3 near4 "N.sub."\$3) ("GaP.sub."\$4 "N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/07 21:25
S1	0	("GaNPorgalliumadjnitrideadjphosphide)andlight-emitting.ti,ab.").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 07:56
S2	12	(GaNP or gallium adj nitride adj phosphide) and light-emitting.ti, ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:10
S3	4	(GaNP or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and boron adj phosphide near3 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 16:53
S4	4	(GaNP or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 16:54
S5	7	(GaNP or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P)) and light-emitting.ti,ab. and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 16:58

S6	4	(GaNP or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:07
S7	4	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:09
S8	4	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or GaN near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:10
S9	4	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and (BP or boron adj phosphide) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:28

S10	342	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:29
S11	275	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:30
S12	4	(GaNP or GaPN or gallium adj phosphide adj nitride or "GaN.sub.x.P.sub.1-x" or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide or GaN near6 P or GaN near6 phosphorus or gallium adj nitride near6 (phosphorus or P) or (gallium adj nitride or GaN) near6 (P or phosphorus)) and (257/8\$5.ccls. or 257/9\$5.ccls. or 257/100.ccls. or 257/101.ccls. or 257/102.ccls. or 257/103.ccls.) and buffer near12 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:34
S13	489	(257/79).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S14	435	(257/80).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35

S15	366	(257/81).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S16	814	(257/82).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S17	106	(257/83).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S18	380	(257/84).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S19	205	(257/85).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S20	229	(257/86).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S21	56	(257/87).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S22	488	(257/88).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35

S23	175	(257/89).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:35
S24	83	(257/90).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S25	147	(257/91).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S26	49	(257/92).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S27	146	(257/93).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S28	685	(257/94).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S29	239	(257/95).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S30	445	(257/96).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36



S31	327	(257/97).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S32	1241	(257/98).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S33	1351	(257/99).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S34	318	(257/100).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S35	278	(257/101).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S36	308	(257/102).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:36
S37	967	(257/103).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:37
S38	0	("L13orL14orL15orL16orL17orL18 orL19orL20orL21orL22orL23orL24 orL25orL26orL27orL28orL29orL30 orL31orL32orL33orL34orL35orL36 orL37").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/30 17:38

S39	6890	((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:40
S40	0	((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and ganp.ti, ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:41
S41	13	((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and (ganp or (gan or gallium adj nitride) near12 phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:43

S42	2	(((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and buffer near12 (bp or boron adj phosphide) and (ganp or (gan or gallium adj nitride) near12 phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:44
S43	13	(((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and (ganp or (gan or gallium adj nitride) near12 phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:47

S44	4	((257/79).CCLS.) or ((257/80).CCLS.) or ((257/81).CCLS.) or ((257/82).CCLS.) or ((257/83).CCLS.) or ((257/84).CCLS.) or ((257/85).CCLS.) or ((257/86).CCLS.) or ((257/87).CCLS.) or ((257/88).CCLS.) or ((257/89).CCLS.) or ((257/90).CCLS.) or ((257/91).CCLS.) or ((257/92).CCLS.) or ((257/93).CCLS.) or ((257/94).CCLS.) or ((257/95).CCLS.) or ((257/96).CCLS.) or ((257/97).CCLS.) or ((257/98).CCLS.) or ((257/99).CCLS.) or ((257/100).CCLS.) or ((257/101).CCLS.) or ((257/102).CCLS.) or ((257/103).CCLS.)) and (gan or gallium adj nitride) and ((bp or boron adj phosphide) near12 buffer)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:53
S45	0	jp-410242514\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:54
S46	2	jp-10242514\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:56
S47	2	jp-10242567\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 17:59
S48	2	jp-10242569\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:09
S49	2	"6316793".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:10
S50	2	"6064082".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:11

S51	2	"5929467".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 18:11
S52	2	jp-10066769\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/30 20:04
S53	0	jp-410066769\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:05
S54	1	jp-10066769\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:06
S55	1	jp-11036830\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:06
S56	0	jp-411036830\$-\$\$.did.	JPO	OR	ON	2002/05/30 20:06
S57	0	terashima.in. and buffer	JPO	OR	ON	2002/05/30 20:13
S58	1	light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer) and gallium adj nitride.ti, ab.	JPO	OR	ON	2002/05/30 20:14
S59	1	light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer) and gallium adj nitride	JPO	OR	ON	2002/05/30 20:14
S60	3	(led or light-emitting or light adj emitting).ti,ab. and ((bp or boron adj phosphide) near10 buffer) and gallium adj nitride	JPO	OR	ON	2002/05/30 20:15
S61	4	(GaN or gallium adj nitride adj phosphide or AlGaN or aluminum adj gallium adj nitride adj phosphide or "GaN.sub.1ix.P.subx") and light-emitting.ti,ab. and buffer near10 (bp or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:13
S62	4	(GaN or gallium adj nitride adj phosphide or AlGaN or aluminum adj gallium adj nitride adj phosphide or "GaN.sub.1-x.P.sub.x") and light-emitting.ti,ab. and (bp or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:15
S63	8	((GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride) near6 (P or phosphide)) and light-emitting.ti,ab. and (bp or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:19
S64	7	((GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride) near6 (P or phosphide)) and light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 07:58

S65	4	((GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride) near6 (P or phosphide)) and light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer) and ((mono-crystal or single adj crystal) near6 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:01
S66	8	light-emitting.ti,ab. and ((bp or boron adj phosphide) near10 buffer) and ((mono-crystal or single adj crystal) near6 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:01
S67	325	light-emitting.ti,ab. and ((mono-crystal or single adj crystal) near6 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:15
S68	184	light-emitting.ti,ab. and ((mono-crystal or single adj crystal) adj substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:16
S69	14	light-emitting.ti,ab. and ((mono-crystal or single adj crystal) adj substrate) and GaN.ti, ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:17
S70	351	buffer adj layer near3 amorphous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:43
S71	4	(bp or boron adj phosphorus) near6 buffer adj layer near3 amorphous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 08:44
S72	38	amorphous adj buffer adj layer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 10:42
S73	3	amorphous adj buffer adj layer and (single adj crystal or single-crystal) adj buffer adj layer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 11:23
S74	64	single adj (heterojunction or hetero-junction) and (double adj heterojunction or hetero-junction) and "257"/\$6.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 11:26



S75	58	(single adj (heterojunction or hetero-junction)) and (double adj (heterojunction or hetero-junction)) and "257"/\$6. ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 12:36
S76	2	("6150672").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/31 11:47
S77	4	(single adj (heterojunction or hetero-junction)).ti,ab. and (double adj (heterojunction or hetero-junction)) and "257"/\$6. ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 13:07
S78	2	("6150672").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/31 13:41
S79	1	(lattice near6 (match\$3 or mismatch\$3)) near12 (boron adj phosphide or BP or BPN or "BP. sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 15:47
S80	1	(lattice near6 (match\$3 or mismatch\$3)) near12 (boron adj phosphide or BP or BPN or "BP. sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride or AlGaN or aluminum adj gallium adj nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 13:44
S81	29	((boron adj phosphide or bp) near12 buffer) near12 (N or nitrogen)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 14:11
S82	1	(lattice near6 (match\$3 or mismatch\$3)) near12 (boron adj phosphide or BP or BPN or "BP. sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 15:59
S83	1	(lattice near6 (match\$3 or mismatch\$3) or lattice-match\$3 or lattice-mismatch\$3) near12 (boron adj phosphide or BP or BPN or "BP. sub.1-x.N.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 16:16



S84	1	(lattice near6 (match\$3 or mismatch\$3) or lattice-match\$3 or lattice-mismatch\$3) near12 (boron adj phosphide or BP or BPN or "BP.sub.1-x.N.sub.x" or BNP or "BN.sub.1-x.P.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 16:33
S85	66	(boron adj phosphide or BP or BPN or "BP.sub.1-x.N.sub.x" or BNP or "BN.sub.1-x.P.sub.x") near12 (GaN or gallium adj nitride or gallium adj nitride adj phosphide or GaNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/31 17:58
S86	0	"10-066769"	JPO	OR	ON	2002/05/31 17:59
S87	1	jp-10066769\$-\$.did.	JPO	OR	ON	2002/05/31 18:00
S88	1	jp-10180921\$-\$.did.	JPO	OR	ON	2002/05/31 18:01
S89	0	jp-410180921\$-\$.did.	JPO	OR	ON	2002/05/31 18:01
S90	0	terashima.in. and semiconductor	JPO	OR	ON	2002/05/31 18:12
S91	2	terashima.in. and "1998"	JPO	OR	ON	2002/05/31 18:14
S92	1	jp-10066769\$-\$.did.	JPO	OR	ON	2002/05/31 18:15
S93	1	jp-10180921\$-\$.did.	JPO	OR	ON	2002/05/31 18:16
S94	1	jp-10193125\$-\$.did.	JPO	OR	ON	2002/05/31 18:17
S95	1	jp-10232279\$-\$.did.	JPO	OR	ON	2002/05/31 18:17
S96	1	jp-11036830\$-\$.did.	JPO	OR	ON	2002/05/31 18:18
S97	2301	udagawa.in.	JPO	OR	ON	2002/05/31 18:18
S98	35	udagawa.in. and light-emitting	JPO	OR	ON	2002/05/31 18:18
S99	3	udagawa.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:22
S100	0	terashima.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:23
S101	0	nishimura.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:23
S102	0	tsuzaki.in. and light-emitting and (BP or boron adj phosphide)	JPO	OR	ON	2002/05/31 18:23
S103	11550	boron adj phosphide or bp	DERWENT	OR	ON	2002/05/31 18:25
S104	245	(boron adj phosphide or bp) and buffer	DERWENT	OR	ON	2002/05/31 18:25
S105	15	(boron adj phosphide or bp) and buffer adj layer	DERWENT	OR	ON	2002/05/31 18:25

S10 6	62	udagawa.in. and light-emitting	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 10:52
S10 7	1076	udagawa.in. and light-emitting and buffer near6 BP or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP.sub.x. N.sub.1-x" or "BN.sub.x.P.sub.1-x" or "BP.sub.1-x.N.sub.x" or ((BP or boron adj phosphide) near3 nitrogen)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 10:56
S10 8	8	udagawa.in. and light-emitting and (buffer near6 (BP or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP. sub.x.N.sub.1-x" or "BN.sub.x.P. sub.1-x" or "BP.sub.1-x.N.sub.x" or ((BP or boron adj phosphide) near3 nitrogen)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 11:22
S10 9	2	terashima.in. and light-emitting and (buffer near6 (BP or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP.sub.x.N.sub.1-x" or "BN.sub.x. P.sub.1-x" or "BP.sub.1-x.N.sub.x" or ((BP or boron adj phosphide) near3 nitrogen)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:29
S11 0	9	light-emitting.ti,ab. and (buffer near6 (BP or BN or BNP or BPN or "BN.sub.1-x.P.sub.x" or "BP.sub.x. N.sub.1-x" or "BN.sub.x.P.sub.1-x" or "BP.sub.1-x.N.sub.x"))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:35
S11 1	0	(lattice adj match\$3 or mismatch\$3) and (((BN or boron adj nitride) near3 buffer) near10 (phosphorus or P)) and (GaN or gallium adj nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:39
S11 2	0	(lattice adj match\$3 or mismatch\$3) and (((BN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:39
S11 3	0	(lattice adj (match\$3 or mismatch\$3)) and (((BN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:40
S11 4	0	(lattice adj (match\$3 or mismatch\$3)) and (((BN or BNP or BPN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:41

S11 5	0	(lattice near6 (match\$3 or mismatch\$3)) and (((BN or BNP or BPN or boron adj nitride) near6 buffer) near10 (phosphorus or P))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:42
S11 6	672	(boron adj nitride or BN or boron adj phosphide or BP or BNP) near6 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 13:43
S11 7	99	(boron adj nitride or BN or boron adj phosphide or BP or BNP) near6 buffer and (GaN or gallium nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 14:48
S11 8	54	(boron adj nitride or BN or BNP) near6 buffer and (GaN or gallium nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 14:50
S11 9	16	(boron adj nitride or BN or BNP) near6 buffer and (GaN or gallium nitride) and (lattice-mismatch or lattice-match\$3 or (lattice near3 (match\$3 or mismatch\$3)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 14:52
S12 0	15	(boron adj nitride or BN or BNP) near6 buffer and (GaN or gallium nitride) near12 (lattice-mismatch or lattice-match\$3 or (lattice near3 (match\$3 or mismatch\$3)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:39
S12 1	0	gallium adj nitride adj phosphide and light-emitting.ti,ab. and phosphorus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:40
S12 2	7	(GaN or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and (phosphorus or P)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:42
S12 3	0	(GaN or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and phosphorus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 15:43
S12 4	2	(GaN or "GaN.sub.1-x.P.sub.x" or gallium adj nitride adj phosphide) and light-emitting.ti,ab. and phosphorus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:21

S12 5	2	lamp.ti,ab. and light-emitting.ti,ab. and semiconductor.ti,ab. and group adj "III-V"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:23
S12 6	6	lamp.ti,ab. and light-emitting.ti,ab. and semiconductor.ti,ab. and GaN	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:31
S12 7	8	lamp.ti,ab. and light-emitting.ti,ab. and GaN	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 17:31
S12 8	3	lamp.ti,ab. and light-emitting.ti,ab. and GaN and mount\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 18:57
S12 9	4	((("5042043") or ("6372356") or ("5612551") or ("5326424"))).PN.	USPAT; USOCR	OR	OFF	2002/06/01 19:01
S13 0	7496	((257/79) or (257/85) or (257/86) or (257/94) or (257/102) or (257/103) or (372/43)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/06/01 19:23
S13 1	3	((((257/79) or (257/85) or (257/86) or (257/94) or (257/102) or (257/103) or (372/43)).CCLS.) and (gallium adj nitride or gallium adj phosphide or GaN or GaP or "GaN.sub.1-x.P.sub.x" or "GaN. sub.x.P.sub.1-x") and buffer near4 (BN or BP or BNP or BPN or "BN. sub.x.P.1-x" or "BN.sub.1-x.P.sub. x" or boron adj nitride or boron adj phosphide) and (lattice near12 (match\$3 or mismatch\$3) or lattice-match\$3 or lattice-mismatch\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/06/01 19:28
S13 2	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/11/10 14:02

S13 3	21	(US-6392257-\$ or US-5326424-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-5612551-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-6064082-\$).did. or (US-20020038892-\$ or US-20020030246-\$ or US-20020000563-\$).did. or (JP-11045892-\$ or JP-10242567-\$ or JP-10242514-\$ or JP-10242569-\$).did. or (JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$ or EP-395392-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2002/11/10 14:08
S13 4	13	((US-6392257-\$ or US-5326424-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-5612551-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-6064082-\$).did. or (US-20020038892-\$ or US-20020030246-\$ or US-20020000563-\$).did. or (JP-11045892-\$ or JP-10242567-\$ or JP-10242514-\$ or JP-10242569-\$).did. or (JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$ or EP-395392-\$).did.) and (amorphous or crytalline or crystal) near12 (boron adj phosphide or bp or buffer or current-blocking or current adj blocking)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 14:09

S13 5	13	((US-6392257-\$ or US-5326424-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-5612551-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-6064082-\$).did. or (US-20020038892-\$ or US-20020030246-\$ or US-20020000563-\$).did. or (JP-11045892-\$ or JP-10242567-\$ or JP-10242514-\$ or JP-10242569-\$).did. or (JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$ or EP-395392-\$).did.) and (amorphous or crystalline or crystal) near12 (boron adj phosphide or bp or buffer or current-blocking or current adj blocking)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 15:47
S13 6	212	oh.in. and won.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 15:48
S13 7	18	oh.in. and won.in. and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 15:48
S13 8	4	oh.in. and won.in. and buffer and nitride	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/10 16:37
S13 9	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/11/10 16:37
S14 0	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/04/15 17:45
S14 1	344	mixed adj crystal near12 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:46



S14 2	254	mixed adj crystal near6 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:47
S14 3	145	mixed adj crystal near3 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:47
S14 4	87	mixed adj crystal near3 (single-crystal or single adj crystal or monocrystal).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/15 17:47
S14 5	0	"GaN.sub.0.97Psub.0.03"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:55
S14 6	0	"Ga N.sub.0.97 P.sub.0.03"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:56
S14 7	0	"Ga N.sub."\$6 near2 "P.sub."\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:58
S14 8	7	"Ga N.sub."	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:58
S14 9	0	"GaN.sub."	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 09:59
S15 0	94	"GaN.sub"\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:00
S15 1	12	"GaN.sub"\$6 and (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:01

S15 2	0	"GaP.sub"\$6 near20 (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:01
S15 3	4	"GaN.sub"\$6 near20 (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:04
S15 4	2	"GaN.sub"\$6 near20 buffer and (BP or boron adj phosphide)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:05
S15 5	1024	mixed adj crystal.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 10:06
S15 6	103	mixed adj crystal.ti. and (single-crystal or single adj crystal or single-crystalline or single adj crystalline or monocrystal or monocrystalline)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:27
S15 7	2	lattice adj match\$3 near20 (boron adj phosphide or BP) near20 (gallium adj nitride or GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:28
S15 8	2	(lattice-match\$3 lattice adj match\$3) near20 (boron adj phosphide or BP) near20 (gallium adj nitride or GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:36
S15 9	86	(gan or gallium adj nitride) near20 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 11:37
S16 0	13	(gan or gallium adj nitride) near20 (boron adj phosphide or bp) near20 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 12:35
S16 1	173	(gan or gallium adj nitride) near20 lattice adj constant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:39

S16 2	11	(gan or gallium adj nitride) near20 buffer adj layer near20 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:40
S16 3	5	(single-crystal or single adj crystal or monocrystalline) near20 (gan or gallium adj nitride) near20 buffer adj layer near20 (boron adj phosphide or bp)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:47
S16 4	556	(vapor adj phase adj growth or CVD) near3 (single-crystal or single adj crystal or monocrystal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 13:56
S16 5	192	(vapor adj phase adj growth or CVD) near3 (single-crystal or single adj crystal or monocrystal). ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 14:37
S16 6	1	increase near12 lattice adj parameter near12 (phosphorous or phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/16 15:52
S16 7	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/04/16 15:52
S16 8	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/10/22 19:01
S16 9	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/10/23 19:10
S17 0	0	((latticeadjmatchinglatticeadjmism atch)and257/79.ccls.257/8\$1.ccls. 257/9\$1.ccls.257/100.ccls. 257/101.ccls.257/102.ccls. 257/103.ccls.)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/10/23 19:12

S17 1	359	(lattice adj matching lattice adj mismatch) and (257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/102.ccls. 257/103.ccls.)	USPAT	OR	OFF	2003/10/23 19:13
S17 2	20	(lattice adj matching lattice adj mismatch).ti,ab,clm. and group adj III and (257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/102.ccls. 257/103.ccls.)	USPAT	OR	OFF	2003/10/23 19:13
S17 3	4447	((257/79) or (257/80) or (257/81) or (257/82) or (257/83) or (257/84) or (257/85) or (257/86) or (257/86) or (257/87) or (257/88) or (257/89) or (257/90) or (257/91) or (257/92) or (257/93) or (257/94) or (257/95) or (257/96) or (257/97) or (257/98) or (257/99) or (257/100) or (257/101) or (257/102) or (257/103)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2003/11/03 11:30
S17 4	8	(((257/79) or (257/80) or (257/81) or (257/82) or (257/83) or (257/84) or (257/85) or (257/86) or (257/86) or (257/87) or (257/88) or (257/89) or (257/90) or (257/91) or (257/92) or (257/93) or (257/94) or (257/95) or (257/96) or (257/97) or (257/98) or (257/99) or (257/100) or (257/101) or (257/102) or (257/103)).CCLS.) and (GaNP GaPN gallium adj phosphide adj nitride) and cubic	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/11/03 11:32
S17 5	5	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:33
S17 6	6	"753393".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 13:57
S17 7	11	(("6069021") or ("5042043") or ("5326424") or ("6121637") or ("5612551")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 13:58

S17 8	55	buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$2"P.sub."\$2 "BP.sub."\$2"N.sub." "\$2) and (laser light-emitting light adj emitting).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 15:28
S17 9	17	buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$3"P.sub."\$3 "BP.sub."\$3"N.sub." "\$3) and (laser light-emitting light adj emitting).ti,ab,clm. and single adj crystal adj substrate and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub." "\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:39
S18 0	19	buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$3"P.sub."\$3 "BP.sub."\$3"N.sub." "\$3) and (laser light-emitting light adj emitting).ti,ab,clm. and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub." "\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 16:56
S18 1	2	(buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub." "\$3"P.sub."\$3 "BP.sub."\$3"N.sub." "\$3) and (laser light-emitting light adj emitting).ti,ab,clm. and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub." "\$3"N.sub."\$3)) not (buffer adj layer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting).ti, ab,clm. and single adj crystal adj substrate and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub."\$3"N.sub."\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 16:23

S18 2	36	(US-6787814-\$ or US-6541799-\$ or US-6150672-\$ or US-6316793-\$ or US-6069021-\$ or US-6064082-\$ or US-5929467-\$ or US-5042043-\$ or US-6194744-\$ or US-5326424-\$ or US-6392257-\$ or US-5612551-\$ or US-6730941-\$ or US-6797990-\$).did. or (US-20020000563-\$ or US-20010054717-\$ or US-20030178631-\$ or US-20020030246-\$ or US-20020038892-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030027099-\$ or US-20030141509-\$ or US-20030173573-\$ or US-20030160253-\$).did. or (JP-10242514-\$ or JP-10242567-\$ or JP-11199397-\$ or JP-11045892-\$ or JP-2002009340-\$ or JP-10242569-\$).did. or (EP-395392-\$ or US-20010054717-\$ or JP-2000332294-\$ or JP-2000188260-\$ or JP-2000004046-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/28 16:25
S18 3	19	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting).ti, ab,clm. and (gallium adj nitride adj phosphide "GaN.sub."\$3"P.sub."\$3 "GaP.sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:13
S18 4	432	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:13
S18 5	110	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:14



S18 6	9	buffer near4 (boron adj phosphide BP BP-based boron adj nitride adj phosphide boron adj phosphide adj nitride "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) and (laser light-emitting light adj emitting) and (GaInN GaNP GaPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:15
S18 7	2	("6194744").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/28 17:39
S18 8	36	(US-5042043-\$ or US-6194744-\$ or US-6069021-\$ or US-6316793-\$ or US-6150672-\$ or US-6392257-\$ or US-5326424-\$ or US-6064082-\$ or US-5929467-\$ or US-6541799-\$ or US-6787814-\$ or US-6797990-\$ or US-6730941-\$ or US-5612551-\$).did. or (US-20010054717-\$ or US-20020000563-\$ or US-20020030246-\$ or US-20030027099-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030178631-\$ or US-20030141509-\$ or US-20030173573-\$ or US-20030160253-\$ or US-20020038892-\$).did. or (JP-2002009340-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-11199397-\$ or JP-10242569-\$ or JP-11045892-\$).did. or (US-20010054717-\$ or EP-395392-\$ or JP-2000332294-\$ or JP-2000004046-\$ or JP-2000188260-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/29 09:59
S18 9	30	(light adj emitting active) near4 (gallium adj nitride adj phosphide gallium adj phosphide adj nitride GaNP GaPN "Ga.sub."\$3"N.sub."\$3"P.sub."\$3 "Ga.sub."\$3"N.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/29 10:02
S19 0	7	(light adj emitting active) near4 (gallium adj nitride adj phosphide gallium adj phosphide adj nitride GaNP GaPN "Ga.sub."\$3"N.sub."\$3"P.sub."\$3 "Ga.sub."\$3"N.sub."\$3"P.sub."\$3) and buffer near4 (BP BPN BNP boron)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2004/09/29 10:13

S19 1	285	UDAGAWA.IN. AND (light adj emitting laser)	JPO; DERWENT	OR	OFF	2004/09/29 10:14
S19 2	122	takashi near2 udagawa.in. and (light adj emitting laser)	JPO; DERWENT	OR	OFF	2004/09/29 10:14
S19 3	122	takashi near2 udagawa.in. and (light adj emitting laser).ti,ab,clm.	JPO; DERWENT	OR	OFF	2004/09/29 10:30
S19 4	0	takashi near2 udagawa.in.	DERWENT	OR	OFF	2004/09/29 10:30
S19 5	27726	showa.as.	DERWENT	OR	OFF	2004/09/29 10:30
S19 6	524	showa.as. and (light adj emitting laser).ti,ab.	DERWENT	OR	OFF	2004/09/29 10:31
S19 7	48	showa.as. and (light adj emitting laser).ti,ab. and buffer.ti,ab.	DERWENT	OR	OFF	2004/09/29 10:42
S19 8	0	amorphous near4 (low adj tempetaure LT) near4 buffer near12 (boron BP BNP BPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 10:43
S19 9	0	(low adj tempetaure LT) near4 buffer near12 (boron BP BNP BPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 10:44
S20 0	27	(low adj temperature LT) near4 buffer near12 (boron BP BNP BPN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:19
S20 1	2	("5789768").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:31
S20 2	0	((("5789768").PN.) and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:22
S20 3	0	((("5789768").PN.) and boron	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:22
S20 4	0	BP and ((("5789768").PN.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:22

S20 5	48	buffer and udagawa.in. and (BP boron) near4 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:35
S20 6	0	("udagawa.in.and(baumeister.xa.baumeister.xp.)).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:31
S20 7	0	udagawa.in. and (baumeister.xa.baumeister.xp.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:31
S20 8	5	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:51
S20 9	2	"20030173573"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:40
S21 0	22	buffer near4 (boron BP B-based BP-based).clm. and (light-emitting laser light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:41
S21 1	3	buffer near4 (boron BP B-based BP-based).clm. and (light-emitting laser light adj emitting) and ("GaN.sub.1-x"\$3"P.sub."\$3 "GaN.sub.x"\$3"P.sub.1-x"\$3).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:53
S21 2	2	("6079064").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:53
S21 3	2	("6078064").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:54

S21 4	2	("5789768").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 11:55
S21 5	2	("5076860").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 12:09
S21 6	7	"GaN.sub."\$3"P.sub."\$3 near4 (active clad cladding light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 12:11
S21 7	38	(gallium adj nitride adj phosphide gallium adj phosphide adj nitride GANP GAPN "GaN.sub."\$3"P.sub. "\$3) near4 (active clad cladding light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 12:20
S21 8	10	(gallium adj nitride adj phosphide gallium adj phosphide adj nitride GANP GAPN "GaN.sub."\$3"P.sub. "\$3) near4 (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:19
S21 9	5	((gallium adj nitride adj phosphide gallium adj phosphide adj nitride GANP GAPN "GaN.sub."\$3"P.sub. "\$3) near4 (clad cladding)) not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:45
S22 0	4	("6233264").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:33
S22 1	1	jp-05141750\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 13:46
S22 2	1	kondo.in. and lattice adj distortion.ti,ab,clm. and epitaxially	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:25

S22 3	9	buffer near5 boron adj phosphide and "GaN.sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 18:15
S22 4	10	buffer near5 (BP BP-based BPN BNP "BP.sub."\$3 "BN.sub."\$3"P.sub."\$3 boron adj phosphide) and "GaN.sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:28
S22 5	13	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:59
S22 6	3	"090344".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 14:59
S22 7	10	buffer near5 (BP BNP BPN "B.sub."\$3"P.sub."\$3 "B.sub."\$3"P.sub."\$3 boron adj phosphide) and "GaN.sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 18:16
S22 8	4	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) near12 ("GaP.sub."\$3"N.sub."\$3 "GaN.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:01
S22 9	2	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer near12 ("GaP.sub."\$3"N.sub."\$3 "GaN.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:02
S23 0	11	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer and ("GaP.sub."\$3"N.sub."\$3 "GaN.sub."\$3"P.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:03
S23 1	597	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:04
S23 2	160	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3 boron) near4 buffer.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:04

S23 3	123	(boron adj phosphide BP BNP BPN "BN.sub."\$3"P.sub."\$3 "BP.sub. "\$3"N.sub."\$3 boron) near4 buffer.ti;ab,clm. not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 08:39
S23 4	5	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 10:26
S23 5	949	mixed adj crystal.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 10:26
S23 6	113	mixed adj crystal.ti. and laser.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 10:26
S23 7	40	mixed adj crystal.ti. and laser.ti. and (active light-emitting).ti,ab, clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:24
S23 8	2	(single adj heterojunction single adj heterostructure SH) and buffer and GaNP and GaInP	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:25
S23 9	2	(single adj heterojunction single adj heterostructure SH) and buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub. "\$3"N.sub."\$3) and GaInP	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:28
S24 0	13	(single adj heterojunction single adj heterostructure SH) and buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub. "\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:30



S24 1	37	buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:33
S24 2	3	buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) near6 (clad cladding) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) near6 (active light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:35
S24 3	3	(gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) near6 (clad cladding) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) near6 (active light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:35
S24 4	34	buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) and (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:35
S24 5	19	(buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) and (clad cladding)) not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:38
S24 6	3	(buffer and (gallium adj nitride adj phosphide GaNP gallium adj phosphide adj nitride GaPN "Ga.N. sub."\$3"P.sub."\$3 "Ga.P.sub."\$3"N.sub."\$3) and (gallium adj indium adj nitride GaInN "GaIn. sub."\$3"N.sub."\$3) near6 (clad cladding)) not udagawa.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:49

S24 7	2	("5042043").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:49
S24 8	0	((("5042043").PN.) and indium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:44
S24 9	31	alumin\$um adj free same indium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:50
S25 0	5	alumin\$um adj free same indium and (light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:54
S25 1	1971	(InN GaN) near4 (active light-emitting light adj emitting)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 11:56
S25 2	5	(InN GaN) near4 (active light-emitting light adj emitting) and (GaNP GaPN "GaN.sub."\$3"P. sub."\$3 "GaP.sub."\$3"N.sub."\$3 gallium adj nitride adj phosphide gallium adj phosphide adj nitride) near4 (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 12:00
S25 3	7	(boron adj phosphide BP) near4 buffer and GaN near4 (light-emitting active light adj emitting) and GaN near4 (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 12:46
S25 4	2	lattice adj constant near4 "GaN. sub."\$3"P.sub."\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 12:47
S25 5	36	"5042043"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 13:35
S25 6	6	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/09/30 13:38

S25 7	7	jp-10242514\$-\$.did. jp-10242567\$-\$.did. jp-10242569\$-\$.did. jp-11045892\$-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 13:55
S25 8	13	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.) (jp-10242514\$-\$.did. jp-10242567\$-\$.did. jp-10242569\$-\$.did. jp-11045892\$-\$.did.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:17
S25 9	13	((("5042043") or ("6372356") or ("5612551") or ("6121637") or ("5326424") or ("6069021")).PN.) (jp-10242514\$-\$.did. jp-10242567\$-\$.did. jp-10242569\$-\$.did. jp-11045892\$-\$.did.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:17
S26 0	22827	257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/103.ccls. 372/4\$1.ccls. 372/50.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:19
S26 1	13	(257/79.ccls. 257/8\$1.ccls. 257/9\$1.ccls. 257/100.ccls. 257/101.ccls. 257/103.ccls. 372/4\$1.ccls. 372/50.ccls.) and boron near4 buffer and gallium adj2 nitride and lattice near2 match\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:30
S26 2	12	advantage near4 phosphorus near12 (dopant doping)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:32
S26 3	0	advantage near4 phosphorus near12 (dopant doping) same GaN same (clad cladding)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:33
S26 4	145	n-type adj GaN near4 (clad cladding) adj layer same (P phosphor\$us)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:34
S26 5	121	n-type adj GaN near4 (clad cladding) adj layer same (P phosphor\$us) and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:34

S26 6	16	n-type adj GaN near4 (clad cladding) adj layer near4 (P phosphor\$us) and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:36
S26 7	0	n-type adj GaN near4 (clad cladding) adj layer near4 (phosphor\$us phosphor) and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:37
S26 8	0	n-type adj GaN near4 (clad cladding) adj layer near4 dopant and (light-emitting light adj emitting laser).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:37
S26 9	0	n-type adj GaN near4 (clad cladding) adj layer near4 dopant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:38
S27 0	0	(n-GaN n-type adj GaN) near4 (clad cladding) adj layer near4 dopant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:38
S27 1	22	(n-GaN n-type adj GaN) near4 (clad cladding) adj layer near4 (doped impurities dopant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/30 14:38
S27 2	27	"6069021"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:46
S27 3	2	("6069021").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:47
S27 4	1	"4293370".PN.	USPAT	OR	OFF	2004/09/30 14:47
S27 5	0	("GaNnear4N-dopednear4Pandligh tadjemitting.ti,ab,clm.").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:48

S27 6	9	GaN near4 N-doped near4 P and light adj emitting.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:51
S27 7	11	(gallium adj nitride GaN) near4 N-doped near4 P and light adj emitting.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:52
S27 8	0	(gallium adj nitride GaN) near4 "doped with P" and light adj emitting.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:52
S27 9	0	(gallium adj nitride GaN) near4 "doped with P"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 0	0	(gallium adj nitride GaN) near6 "doped with P"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 1	0	(gallium adj nitride GaN) near6 "doped with phosphorus"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 2	0	(gallium adj nitride GaN) near6 "doped with phosphorous"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:53
S28 3	2	(gallium adj nitride GaN) adj layer near4 doped same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:09
S28 4	2	(gallium adj nitride GaN) adj layer near4 (doping doped) same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:56
S28 5	10	(gallium adj nitride GaN) adj layer near4 (n-type doping doped) same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 14:56

S28 6	9	(gallium adj nitride GaN) adj layer near4 n-type same (phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:11
S28 7	795	(gallium adj nitride GaN) adj layer near4 n-type same ("P" phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:12
S28 8	287	(gallium adj nitride GaN) adj layer near4 n-type near4 ("P" phosphorous phosphorus phosphor)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:27
S28 9	21	(gallium adj nitride GaN) adj layer near4 n-type near4 ("P" phosphorous phosphorus phosphor) and (phosphorous phosphorus)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/30 15:28
S29 6	12	jp-05283744\$-\$\$.did. jp-11266006\$-\$\$.did. jp-02288388\$-\$\$.did. jp-08064870\$-\$\$.did. jp-08236810\$-\$\$.did. jp-2000012896\$-\$\$.did. jp-20000311614\$-\$\$.did.	JPO; DERWENT	OR	OFF	2005/03/09 06:21
S29 7	14	jp-05283744\$-\$\$.did. jp-11266006\$-\$\$.did. jp-02288388\$-\$\$.did. jp-08064870\$-\$\$.did. jp-08236810\$-\$\$.did. jp-2000012896\$-\$\$.did. jp-2000031164\$-\$\$.did.	JPO; DERWENT	OR	OFF	2005/03/09 06:21
S29 8	26	(US-6121637-\$ or US-6069021-\$ or US-5042043-\$ or US-6372356-\$ or US-5612551-\$ or US-5326424-\$).did. or (JP-11045892-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-11045892-\$ or EP-395392-\$ or JP-10242514-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	USPAT; JPO; DERWENT	OR	OFF	2005/03/09 06:24



S29 9	26	(US-6121637-\$ or US-6069021-\$ or US-5042043-\$ or US-6372356-\$ or US-5612551-\$ or US-5326424-\$).did. or (JP-11045892-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-11045892-\$ or EP-395392-\$ or JP-10242514-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	USPAT; JPO; DERWENT	OR	OFF	2005/03/09 07:07
S30 0	2	("6069021").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 10:26
S30 1	6	"753393".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 07:56
S30 2	26	(US-6121637-\$ or US-6069021-\$ or US-5042043-\$ or US-6372356-\$ or US-5612551-\$ or US-5326424-\$).did. or (JP-11045892-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-11045892-\$ or EP-395392-\$ or JP-10242514-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	USPAT; JPO; DERWENT	OR	OFF	2005/03/09 08:12
S30 3	3	S302 and dislocation	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 08:13

S30 4	634	dislocation adj density and lattice adj (mismatch\$3 match\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 08:21
S30 5	376	dislocation adj density and lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:23
S30 6	0	S302 and dislocation adj density and lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:23
S30 7	15	dislocation adj density near6 lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:29
S30 8	15	dislocation adj density near6 lattice adj (mismatch\$3 match\$3) and (gallium adj nitride GaN) and dislocation adj density	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 08:29
S30 9	6	(US-20040144990-\$ or US-20020086627-\$).did. or (US-5321101-\$ or US-4633280-\$ or US-4086078-\$).did. or (EP-753393-\$).did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2005/03/09 09:42
S31 0	1	(US-20040144990-\$).did.	US-PGPUB	OR	OFF	2005/03/09 09:43
S31 1	0	Mg adj doped near4 ("Ga.sub." "\$3"In.sub." "\$3"N" and lattice adj (parameter constant))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 10:33
S31 2	0	"Ga.sub." "\$3"In.sub." "\$3"N" near4 lattice adj (parameter constant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 10:34
S31 3	78	"Ga.sub." "\$3"In.sub." "\$3"N" and lattice adj (parameter constant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 10:34

S31 4	6	(undoped un-doped) near3 "Ga. sub."\$3"In.sub."\$3"N" and lattice adj (parameter constant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 13:10
S31 5	59	single adj heterostructure and (GaN GaInN) and (372/4\$1.ccls. 372/50.ccls. 257/79.ccls. 257/8\$1. ccls. 257/9\$1.ccls. 257/10\$1.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 13:12
S31 6	14	(JP-11266006-\$ or JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$).did. or (JP-05283744-\$ or JP-08064870-\$ or EP-395392-\$ or JP-2000012896-\$ or JP-08236810-\$ or JP-2000031164-\$ or JP-11266006-\$).did.	JPO; DERWENT	OR	OFF	2005/03/09 15:28
S31 7	2	("5042043").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 15:35
S31 8	3	("GaN.sub."\$3"P.sub."\$3 "GaP. sub."\$3"N.sub."\$3) near4 (clad cladding) adj (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:15
S31 9	6	"885943".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:22
S32 0	13	((("5042043") or ("5326424") or ("5612551") or ("6069021") or ("6121637") or ("6372356"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:39
S32 1	2	("6,339,014").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:32
S32 2	0	S320 and single adj heterostructure	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:39

S32 3	0	S320 and (single adj heterostructure single-heterostructure)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/09 16:39
S32 4	0	S320 and (single adj heterostructure single-heterostructure)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:44
S32 5	310	(single adj heterostructure single-heterostructure) and (light-emitting laser light adj emitting).ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:44
S32 6	0	(single adj heterostructure single-heterostructure) and (light-emitting laser light adj emitting).ti,ab,clm. and (boron BP "BN.sub."\$3"P.sub."\$3 "BP.sub."\$3"N.sub."\$3) near4 (buffer binding adhesive adhesion transitiona\$2 matching)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/09 16:46

S32 7	72	(US-20010054717-\$ or US-20020000563-\$ or US-20020030246-\$ or US-20020038892-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030027099-\$ or US-20030047795-\$ or US-20030141509-\$ or US-20030160253-\$ or US-20030173573-\$ or US-20030178631-\$ or US-20030209714-\$ or US-20030234400-\$ or US-20040144990-\$ or US-20040169180-\$ or US-20040183089-\$).did. or (US-5042043-\$ or US-5326424-\$ or US-5612551-\$ or US-5929467-\$ or US-6064082-\$ or US-6069021-\$ or US-6078064-\$ or US-6121637-\$ or US-6150672-\$ or US-6194744-\$ or US-6266355-\$ or US-6316793-\$ or US-6339014-\$ or US-6342405-\$ or US-6372356-\$ or US-6392257-\$ or US-6541799-\$ or US-6613461-\$ or US-6730941-\$ or US-6787814-\$ or US-6797990-\$).did. or (JP-10032370-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-10247760-\$ or JP-11045892-\$ or JP-11199397-\$ or JP-2000058451-\$ or JP-2000150957-\$ or JP-2000174342-\$ or JP-2000235956-\$ or JP-2001320089-\$ or JP-2002009340-\$ or JP-2000012896-\$ or JP-11266006-\$ or JP-08236810-\$ or JP-08064870-\$ or JP-05283744-\$ or JP-02288388-\$ or JP-2000031164-\$).did. or (EP-395392-\$ or JP-11045892-\$ or JP-2000188260-\$ or JP-2000332294-\$ or JP-2000004046-\$ or US-20010054717-\$ or JP-2001320089-\$ or JP-2000012896-\$ or JP-11266006-\$ or JP-08236810-\$ or JP-08064870-\$ or JP-05283744-\$ or JP-2000031164-\$ or US-6069021-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2005/03/09 16:55
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S328	12	S327 and (single adj heterostructure single adj hetero)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2005/03/09 16:55
S330	688	(GaInN InGaN "Ga.sub."\$4"In.sub."\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:50
S331	5	(GaInN InGaN "Ga.sub."\$4"In.sub."\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub."\$4"N.sub."\$4) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:14
S332	55	(GaInN InGaN "Ga.sub."\$4"In.sub."\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub."\$4"N.sub."\$4 (p-doped p-type) near10 GaN) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:57
S333	69	(GaInN InGaN "Ga.sub."\$4"In.sub."\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub."\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:58
S334	30	(GaInN InGaN "Ga.sub."\$4"In.sub."\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub."\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film) and S332	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:58
S335	29	(GaInN InGaN "Ga.sub."\$4"In.sub."\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub."\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film) and S332 and (buffer intermediate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:59



S33 6	7	(GaInN InGaN "Ga.sub."\$4"In.sub." "\$4N "In.sub."\$4"Ga.sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P.sub."\$4 "GaP.sub." "\$4"N.sub."\$4 (n-doped n-type) near10 GaN) near10 (clad cladding) adj2 (layer film) and S332 and (buffer intermediate) near10 (boron boron-based BP B)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 07:59
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S33 7	73	(US-20010054717-\$ or US-20020000563-\$ or US-20020030246-\$ or US-20020038892-\$ or US-20020113235-\$ or US-20030001162-\$ or US-20030027099-\$ or US-20030047795-\$ or US-20030141509-\$ or US-20030160253-\$ or US-20030173573-\$ or US-20030178631-\$ or US-20030209714-\$ or US-20030234400-\$ or US-20040144990-\$ or US-20040169180-\$ or US-20040183089-\$ or US-20030205711-\$).did. or (US-5042043-\$ or US-5326424-\$ or US-5612551-\$ or US-5929467-\$ or US-6064082-\$ or US-6069021-\$ or US-6078064-\$ or US-6121637-\$ or US-6150672-\$ or US-6194744-\$ or US-6266355-\$ or US-6316793-\$ or US-6339014-\$ or US-6342405-\$ or US-6372356-\$ or US-6392257-\$ or US-6541799-\$ or US-6613461-\$ or US-6730941-\$ or US-6787814-\$ or US-6797990-\$).did. or (JP-02288388-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-08236810-\$ or JP-10032370-\$ or JP-10242514-\$ or JP-10242567-\$ or JP-10242569-\$ or JP-10247760-\$ or JP-11045892-\$ or JP-11199397-\$ or JP-11266006-\$ or JP-2000012896-\$ or JP-2000031164-\$ or JP-2000058451-\$ or JP-2000150957-\$ or JP-2000174342-\$ or JP-2000235956-\$ or JP-2001320089-\$ or JP-2002009340-\$).did. or (EP-395392-\$ or JP-05283744-\$ or JP-08064870-\$ or JP-08236810-\$ or JP-11045892-\$ or JP-11266006-\$ or JP-2000012896-\$ or JP-2000031164-\$ or US-6069021-\$ or JP-2000188260-\$ or JP-2000332294-\$ or JP-2000004046-\$ or US-20010054717-\$ or JP-2001320089-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2005/03/10 09:25
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S33 8	24	S337 and (single adj crystal monocrystalline monocrystal) near6 (clad cladding nitride GaN)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:10
S33 9	2	jp-2000188260\$-\$\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:18
S34 0	35	"6069021"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:18
S34 1	2	("6069021").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/10 10:44
S34 2	8	(GaInN InGaN GaN InN "Ga.sub." "\$4" In.sub."\$4N "In.sub."\$4"Ga. sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P. sub."\$4 "GaP.sub."\$4"N.sub."\$4) near10 (clad cladding) adj2 (layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 10:58
S34 3	5	(GaInN InGaN GaN InN "Ga.sub." "\$4" In.sub."\$4N "In.sub."\$4"Ga. sub."\$4N) near10 (active light-emitting) adj2 (layer film) and (GaNP GaPN "GaN.sub."\$4"P. sub."\$4 "GaP.sub."\$4"N.sub."\$4) near10 (clad cladding) adj2 (layer film) and (buffer intermediate matching) near5 (boron-based boron BP BN BPN BNP)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 10:59
S34 4	149	(single adj crystal monocrystalline) near4 mocvd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:14
S34 5	67	(single adj crystal monocrystalline) near4 mocvd and nitride and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:15

S34 6	54	(single adj crystal monocrystalline) near4 mocvd and nitride.ti,ab,clm. and buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:21
S34 7	35	(single adj crystal monocrystalline) near4 mocvd.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/10 11:21